Botanical Gazette.

Vol. V.

AUGUST AND SEPTEMBER, 1880.

Nos. 8 & 9.

EDITORIAL.—DR. ASA GRAY sailed for Europe September 4th, to be absent a year or two. His head quarters will be Kew Gardens, but he will probably visit several of the large herbaria upon the continent. This trip is in connection with Dr. Gray's work upon the Synoptical Flora of North America. It is to be hoped that this crowning work of a long botanical life will be speedily completed, although the author has met with very little financial encouragement thus far. To be poorly patronized seems to be the necessary accompaniment of very great works, for they are necessarily expensive. The Synoptical Flora, though, should be in the hands of every North American botanist, especially those to whom the author has uniformly given a kind hearing and prompt response. A note to Dr. Goodale or Screno Watson at Cambridge would probably elicit all desired information as to price.

A LARGE COLLECTION of the products of Indian plants has just been received at the Botanic Gardens, Cambridge, from Kew. The collection is a part of what was put up in India for the Vienna Exhibition and is very rich in its representation of Indian drugs, foodstuffs and vegetable products used in the arts and manufactures. For illustrating lectures upon economic botany it is very complete, as there are representatives of useful products from nearly every family. The University of Wisconsin, Purdue University, and Wabash College, Ind., are under very great obligations to the Director of the Botanic

Gardens for very complete duplicate collections.

IN THE JULY NUMBER of the GAZETTE we announced the proposed exploration of the botany of the West Indies, under the direction of Baron Eggers, of St. Thomas. We should add that the particular aim of this exploration will be to make known the botany of the great islands of Hayti, Dominica, and Porto Rico, of which very little is really known, and that little is of ancient date, and little accessible. Also, that it is intended to have the plants arranged and studied by high authorities, and generally named before distribution. It having been suggested that the price for phaenogamous plants, announced at \$12.50 the century, is rather high, we understand that it is intended to bring it down to the usual ten dollars the hundred specimens. But in this case a good number of subscribers should be secured.

DR. DODEL-PORT, of Zurich, has published the first two parts of a new botanical work. The title is "Illustrirtes Pflanzenleben." The

first part is devoted to a popular description of the lower fungi, such as those which produce putrefaction and contagion. Part second is devoted to carnivorous plants. The whole work is profusely illustrated.

EUCALYPTOGRAPHIA is the title of a descriptive atlas of the Eucalypts of Australia and the adjoining islands, by Baron F. von Mueller. At present there have been published but two decades of the work. This group of trees seems to be a most remarkable one in size and in value. The genus *Eucalyptus* is a very large one, and by no means have all the forms been described. The Eucalypts, as they are called, are said to yield hard timber, oils, tars, acids, dyes, tan, and potash. Some of them rise to a height of 300 feet, with a stem six feet in diameter, and sometimes ten. Packing paper has been prepared from the inner layers of the bark. One species, *E. alpina*, is remarkable for its limited geographical range, being found only on the summit of Mt. Williams, Victoria, at an elevation of over 4,000 feet.

The agents for this work in London are Messrs. Trubner & Co.

EVOLUTION OF THE VEGETABLE KINGDOM, by Dr. Adolf Engler. Part I of this work is noticed in *Nature*, from which we take the following synopsis of contents: "The subject, 'The Extratropical Region of the Northern Hemisphere,' is divided into five sections. In the first section the author treats of the development of the flora of North America from the Miocene period to the Glacial epoch; the second is devoted to the development of the flora of Eastern and Central Asia since Tertiary times; the third to the main features of the development of the Mediterranean flora since the Tertiary period; the fourth to the development of high mountain flora before, during, and after the Glacial epoch; and the fifth to the consideration of the development of the floras of other countries influenced by the Glacial periods."

A NEW ENGLISH TEXT-BOOK OF BOTANY has been translated from the German of Prof. K. Prantl and revised by S. H. Vines. The object of this work is to provide a more elementary text book than Sachs, but, at the same time, to follow his method of treatment. It seems to be principally made up of Sachs simplified, and in spite of some minor blemishes the reviewer in *Nature* pronunces it emphatically to be the best of its kind in the English language.

The Royal Gardens, Kew, have been lately receiving some valuable gifts. The herbarium of Dr. Goodenough, who died in 1827, has been transferred to the Gardens and the great collection of mosses accumulated by the late Prof. Schimper, has been presented to Kew by the Baroness Burdett Couts. Dr. M. C. Cooke has entered upon his duties as Cryptogamist of the Herbarium, taking charge of all the non-vascular cryptogams.

JAMAICA DOGWOOD, or *Piscidia Erythrina*, promises to come into quite prominent use as a medicine, the bark of the root yielding a drug that is claimed can be used as opium and with much better effects. It has been used in Jamaica and England as a nervous sedative, and a contributor to the *Therapeutic Gazette*, says that the

sleep produced by it is "tranquil and refreshing, and free from dreamy sensations." Something that will soothe irritated nerves without any

evil result is surely a desideratum.

MAWAH FLOWERS (Bassia latifolia) are exciting a good deal of attention just now. This plant is cultivated as cattle food, and several tons of the flowers have been received in New York from Calcutta. When packed they form a dark brown, sticky mass which is anything but attractive. The flowers are very highly prized in India, both as an article of food and for use as a source of liquors. But the remarkable part of it is the nourishing material of the flower is lodged in the corolla, which is usually only a protective or attractive organ. This corolla contains no less than 63.40 per cent. of sugar, or more than half its weight. An excellent figure and full description of this curious plant appears in the American Agriculturist for September.

MR. LUCIEN M. UNDERWOOD, in the last *Torrey Bulletin*, gives some artificial synopses which are of considerable interest because they attempt to simplify such perplexing groups of plants. Of course the value of such keys depends upon their usefulness, and that can be easily tested. If we can take the synopsis of the *Umbelliferæ*, *Carices*, or *Salix* as given by Mr. Underwood and with reasonable ease find the specific name of any member of these groups. these pages of the *Bulletin* should be cut out and pasted in our Manuals.

The American Journal of Science and Arts for August, contains a very curious note in the Natural History Department of "Scientific Intelligence," which is rather unusual in that eminent journal, for it devotes half a page to a note on "Mucerini as the Chief Source of Mineral Coal," which in a clause at its close it shows to be unworthy of any notice. When an investigator announces conclusions that are "wholly opposed," not only to "those of other investigators." but to "the facts," and when he has "evidently misunderstood the objects under examination" and given us "supposed facts," It is generally supposed that Silliman's Journal will ignore him.

"Dog-Fennel" seems to change its name with its place. In glancing over an agricultural paper we see notices of "dog fennel," and the eastern editor says it is *Eupatorium fwniculaceum*. This may be so where this *Eupatorium* grows, but to every man, woman and child in the west, "dog-fennel" means *Maruta Cotula*, or the eastern

"May-weed."

PROCEEDINGS OF THE PHILADELPHIA ACADEMY, Part I, 1880, is just at hand, and we note the report of the committee on plants introduced by means of the International Exhibition. The report can be condensed into the simple word "nothing," for although 13 plants were found that were "strangers," not a single one of them showed any tendency to set seed or spread. Some of the 13 are our own western plants, others are from Europe, and a few from Japan.

NOTULÆ EXIGUÆ.—In the May number of the GAZETTE the undersigned asked for fresh seeds of *Ipomæa pandurata*. A few were kindly supplied by an obliging correspondent (whose letter and name have